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APPLICATION NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO.
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EXAMINER

ART UNIT

PAPER NUMBER

2415

DATE MAILED:

06/18/97

This is a communication from the examiner in charge of your application.
COMMISSIONER OF PATENTS AND TRADEMARKS

OFFICE ACTION SUMMARY

- ☐ Responsive to communication(s) filed on _____
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 D.C. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire three month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

- ☒ Claim(s) 1-12 is/are pending in the application.
- Of the above, claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-5 and 8-11 is/are rejected.
- ☒ Claim(s) 6, 7, and 12 is/are objected to.
- ☐ Claims _____ are subject to restriction or election requirement.

Application Papers

- ☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☒ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
- ☐ received.
- ☐ received in Application No. (Series Code/Serial Number) _____
- ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

- ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- ☒ Notice of Reference Cited, PTO-892
- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____
- ☐ Interview Summary, PTO-413
- ☒ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Notice of Informal Patent Application, PTO-152

-- SEE OFFICE ACTION ON THE FOLLOWING PAGES --

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DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: element 15 illustrated in figure 1c has not been described in the specification. Pages 1 and 2 of the specification describe figure 1c and these pages do not describe element 15.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

3. Claims 1-5 and 8-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Poradish et al U.S. Patent No. 5,612,753. Poradish describes using two spatial light modulators and two wheels or one color wheel in the same way that applicant uses two liquid crystal displays and two color wheels or one color wheel. The examiner takes official notice that spatial light modulators include liquid crystal displays. Poradish does not exclude the use of a liquid crystal display as a

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spatial light modulator. Column 4 lines 11-14 describes having the second spatial light modulator out of phase by 180 degrees since the second display is 180 degrees from the first spatial light modulator.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Poradish et al U.S. Patent No. 5,612,753. This claim only adds the broad feature of aligning the projected image from the first spatial light modulator with the projected image from second spatial light modulator. This feature is always performed at some step in the design and assembly process. The examiner takes official notice of this fact. This claim is so that broad that it would have been extremely obvious to one of rudimentary skill in the projection art at the time of applicants invention to align the first and second images so when they are optically combined the first and second images will appear as one image rather than as two spatially separated but overlapping images.

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Prior Art

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The Sparks article and the Efron article are proof that liquid crystal displays are spatial light modulators.

Allowable Subject Matter

7. Claim 6, 7, and 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.


8. The following is a statement of reasons for the indication of allowable subject matter: The prior art of record fails to teach or suggest using a sheet of optically transparent material to align the projected image from one spatial light modulator with the projected image from the other spatial light modulator.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffery A. Brier whose telephone number is (703) 305-4723. The examiner can normally be reached on Monday through Friday from 8:15am to 4:45pm eastern time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Powel, can be reached on (703) 305-3900. The fax phone number for this Art Unit is (703)-305-6606.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

June 16, 1997


JEFFERY BRIER
PRIMARY EXAMINER
GROUP 2600